

WHAT IS CLAIMED AS NEW AND DESIRED TO BE SECURED BY LETTERS  
PATENT OF THE UNITED STATES IS:

1. An athletic shoe comprising:
  - (a) a sole assembly; and
  - (b) a cushioning arrangement disposed within said sole assembly, said cushioning arrangement including:
    - (i) at least one cushioning element; and
    - (ii) a stiffening spring at least partially surrounding said at least one cushioning element;wherein said stiffening spring has a stiffness greater than said at least one cushioning element.
2. An athletic shoe as recited in claim 1, wherein a portion of said cushioning spring is disposed adjacent to a periphery of said shoe and said stiffening spring at least partially defines an aperture, and wherein said at least one cushioning element is disposed in said aperture such that said at least one cushioning element can be seen and touched from an exterior of said shoe.
3. An athletic shoe as recited in claim 2, wherein a first plurality of cushioning elements are disposed in said aperture.
4. An athletic shoe as recited in claim 3, wherein a space is provided between adjacent ones of said first plurality of cushioning elements.
5. An athletic shoe as recited in claim 4, wherein a second plurality of cushioning elements are provided, and wherein said second plurality of cushioning elements are disposed behind said first plurality of cushioning elements with respect to a viewing direction from an exterior of said shoe and through said aperture.

6. An athletic shoe as recited in claim 5, wherein said second plurality of cushioning elements are staggered with respect to said first plurality of cushioning elements such that said second plurality of cushioning elements are visible through said spaces between said first plurality of cushioning elements.

7. An athletic shoe as recited in claim 6, wherein said stiffening spring surrounds said first plurality of cushioning elements.

8. An athletic shoe as recited in claim 7, wherein said stiffening spring has a curved top disposed above said first plurality of cushioning elements and a substantially flat bottom disposed below said first plurality of cushioning elements.

9. An athletic shoe as recited in claim 8, wherein said second plurality of cushioning elements are not disposed within said stiffening spring.

10. An athletic shoe as recited in claim 9, wherein said stiffening spring and said first and second pluralities of cushioning elements are disposed in a heel region of said shoe, said shoe further including a central cushioning arrangement disposed in a central portion of said heel region, and wherein said central cushioning arrangement includes a plurality of cushioning ribs extending in a widthwise direction of said shoe.

11. An athletic shoe as recited in claim 10, wherein spaces between adjacent ones of said cushioning ribs of said central cushioning arrangement are staggered with respect to said first and second plurality of cushioning elements such that a line of sight is provided extending from a location exterior to said shoe and through said cushioning ribs and first and second cushioning elements.

12. An athletic shoe as recited in claim 8, wherein two of said cushioning arrangements are provided, and wherein a first of said cushioning arrangements is disposed on a medial side of said shoe in a heel region of said shoe, and further wherein a second of said cushioning arrangements is provided on a lateral side of said shoe in said heel region.

13. An athletic shoe as recited in claim 12, further including a central cushioning arrangement disposed in a central portion of said heel region, and wherein said central cushioning arrangement includes a plurality of cushioning ribs extending in a widthwise direction of said shoe.

14. An athletic shoe as recited in claim 13, wherein said cushioning ribs of said central cushioning arrangement and said first and second pluralities of cushioning elements are disposed such that a line of sight is provided extending from a location exterior to said shoe through said cushioning ribs and through said two cushioning arrangements such that a line of sight is provided extending through the width of said shoe in said heel region.

15. An athletic shoe as recited in claim 1, wherein said stiffening spring includes a curved top disposed above said at least one cushioning element and a substantially flat bottom disposed below said at least one cushioning element.

16. An athletic shoe as recited in claim 15, wherein two of said cushioning arrangements are provided, and wherein a first of said cushioning arrangements is disposed on a medial side of said shoe in a heel region of said shoe, and further wherein a second of said cushioning arrangements is provided on a lateral side of said shoe in said heel region.

17. An athletic shoe as recited in claim 16, further including a central cushioning arrangement disposed in a central portion of said heel region, and wherein said central cushioning arrangement includes a plurality of cushioning ribs extending in a widthwise direction of said shoe.

18. An athletic shoe as recited in claim 17, further including a first set of cushioning elements disposed between said first cushioning arrangement and said central cushioning arrangement, and a second set of cushioning elements disposed between said second cushioning arrangement and said central cushioning arrangement.

19. An athletic shoe as recited in claim 18, wherein a first plurality of cushioning elements are disposed within said stiffening spring of said first cushioning arrangement and a second plurality of cushioning elements are disposed within said stiffening spring of said second cushioning arrangement.

20. An athletic shoe as recited in claim 19, wherein said first and second sets of cushioning elements, said first and second pluralities of cushioning elements, and said cushioning ribs of said central cushioning arrangement are disposed such that a line of sight extends through a width of said shoe in said heel region.

21. An athletic shoe comprising:

(a) a sole assembly;

(b) a plurality of cushioning arrangements provided across a width of said sole assembly, said plurality of cushioning arrangements including:

(i) a first cushioning assembly disposed on a medial side of said shoe;

(ii) a second cushioning assembly disposed adjacent to said first cushioning assembly;

(iii) a third cushioning assembly;

(iv) a fourth cushioning assembly disposed such that said third cushioning assembly is disposed between said second and fourth cushioning assemblies; and

(v) a fifth cushioning assembly disposed on a lateral side of said shoe.

22. An athletic shoe as recited in claim 21, wherein said first and fifth cushioning assemblies each include:

at least one cushioning element; and

a stiffening spring at least partially surrounding said at least one cushioning element, wherein said stiffening spring has a stiffness greater than said at least one cushioning element.

23. An athletic shoe as recited in claim 22, wherein said stiffening spring includes a curved top disposed above said at least one cushioning element and a substantially flat bottom disposed below said at least one cushioning element.

24. An athletic shoe as recited in claim 23, wherein said first and fifth cushioning assemblies have a substantially similar stiffness.

25. An athletic shoe as recited in claim 24, wherein said second and fourth cushioning assemblies have a substantially similar stiffness which is less than said stiffness of said first and fifth cushioning assemblies.

26. An athletic shoe as recited in claim 22, wherein said second and fourth cushioning assemblies each include at least one cushioning element, said cushioning elements of said second and fourth cushioning assemblies being staggered relative to said cushioning elements of said first and fifth cushioning assemblies, such that said cushioning elements of said second and fourth cushioning assemblies are visible from locations exterior to said shoe.

27. An athletic shoe as recited in claim 26, wherein said third cushioning assembly includes a plurality of cushioning ribs extending along said width of said shoe.

28. An athletic shoe as recited in claim 27, wherein said cushioning ribs and said cushioning elements are positioned such that a line of sight extends through the width of said shoe.

29. A cushioning arrangement for an athletic shoe, comprising:  
at least one cushioning element; and  
a stiffening spring at least partially surrounding said at least one cushioning element,  
wherein said stiffening spring has a stiffness greater than said at least one cushioning element.

30. A cushioning arrangement as recited in claim 29, wherein said at least one cushioning element comprises a plurality of cushioning elements.

31. A cushioning arrangement as recited in claim 30, wherein said cushioning elements have an hourglass shape.

32. A cushioning arrangement as recited in claim 31, wherein said cushioning elements are formed by inverted truncated cones.

33. A cushioning arrangement as recited in claim 30, wherein said stiffening spring surrounds said plurality of cushioning elements.

34. A cushioning arrangement as recited in claim 33, wherein said stiffening spring has a curved top disposed above said plurality of cushioning elements and a substantially flat bottom disposed below said plurality of cushioning elements.

35. A cushioning arrangement as recited in claim 29, wherein said at least one cushioning element is disposed in an aperture defined by said stiffening spring.